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Beginning? End? or Pivot?

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SCHOOL AND SOCIETY

Volume XVI | Saturday, October 7, 1922 | Number 406

THE SCHOOLS IN SOVIET RUSSIA[1]

But for wars, internal and external, the Allied blockade and the consequent prodigious impoverishment, Russia might have worked out the most significant experiment in modern educational methods. What John Dewey and other progressive educators have for long advocated, what was essayed as experiments in but few small and isolated cases, the Soviet government applied on a nation-wide scale. Instead of the generally followed classroom recitation methods, it introduced the principle of learning through work. The Soviet Commissariat of education adopted the practical and laboratory method of education, *i. e.*, education through activity and creation rather than through mere book learning and lectures.

As the basis of the entire educational program, the Soviet government established what are known as the "Unified Work Schools." These were originally divided into two grades, the first for children from eight to 12 years of age, and the second for children from 12 to 17 years of age. The new school abolished all class and racial distinctions such as were fostered by the previous school system. In principle, it was declared that every child in Russia enters the same school and has the same opportunity of graduating from the higher schools. Education here was to be general, polytechnical and the same for both sexes. Specialization was to be permitted only after the seventeenth year. Diplomas and certificates giving any special rights and privileges as well as examinations were abolished.

The work principle was introduced in these schools upon the theory that a child's memory is primarily of a motor-muscular character; that the psychological makeup of the child demands physical activity, especially during the early stages of development, and that it remembers best what it has done with its own hands. By doing and creating something, the child's interest is awakened, attention strengthened, and its imagination developed. This form of education was also designed for the purpose of making the child understand that useful labor is honorable labor. The children were to be trained that education is not separated from work and work from education. The value of collective and cooperative labor was to be learned thus. The interest of the pupils was to be attracted by assigning them tasks to solve concerning their own lives as well as by acquainting them with the things that surround them.

This industrialization of the school did not, however, involve labor as such. The younger children were to be taught only how to take care of themselves, and the importance of self-reliance and self-aid. Thus the children were made to clean the school rooms, care for the kitchen, garden, etc. Factory and shop work was taught by allowing the older children to go to those places as part of their school time. Girls were given instruction in cooking, washing and cleaning. The introduction

[1]The writer of this article spent the past year abroad studying conditions in France, Germany, the new Eastern Republics, and Russia. He was in Russia about eight months.

of the work principle was based upon the theory that physical activity is essential for the physical and mental development of the child.

By means of the creative principle, all cut and dried subjects were to be made interesting and attractive. Even arithmetic was made a living and concrete subject by assigning the children concrete problems. Thus, instead of assigning such mathematical problems as the mysterious A and B buying from each other and selling it to the still more obscure C, as is the case in most schools, the Russian educational program suggested that the children be asked to bring in a report, after consultation with their parents, as to the amount of food stuffs necessary for their family, for wheat, potatoes, flour, beans, etc., and the sums necessary for all of these. Or they were to be asked to consult their father and make a report as to the amount of corn, oats and beans there is being sown per acre, the teacher only showing how to arrange the figures. To teach measures and surveying the children are asked to measure up and make a report of the size of their room, their school, desks, the fields surrounding the school, etc. Arithmetic is thus taken out from the realm of "dry" subjects and made intensely fascinating while the child is at the same time made familiar with the elemental things surrounding it. In the same way the children are asked to figure out, after consultation with the teacher, how much paper and pencil each uses in a week, a month, a year, and then figure out how much is used by the entire school, the city, the district, etc., and the amounts it cost the government to supply these, thus making the children appreciate what the government is doing for them. The same practical and research methods were to be practiced for all other subjects. In teaching geography, for instance, certain facts about populations and area were to be given and the children asked to find out and compare the population of their town, the number of families and homes in their village, etc. History was to be taught as something which concerns humanity and not as a matter which concerns only one nation. Religion might be taught at home only and was the concern of the parents.

As the children grow up into the later stages of school life, it was provided that they be made familiar with the industrial life of the country by visits to factories, shops, mines, railroads, offices, etc. Generally the children in the rural communities were to be concerned mostly with rural activities while the city children were to be more directly connected with the industrial life, thus forming a vital association between the school and its surroundings. Attempts were also made to arrange excursions for the city children to the country and for country children to the city and industrial centers in order to broaden their outlook and comprehension.

In what is known as the second grade of the Unified Work Schools, *i. e.*, for children from ages 12 to 17, the principle followed was the polytechnic method of instruction through labor. The aim sought here was general knowledge rather than specialization. The latter was at first permitted only after graduating from both grades of the school, or on the seventeenth year. During 1921, after much agitation and discussion on the subject, children were permitted to enter special technical schools at the age of fourteen, or after six years of schooling. Because of the increasing poverty and curtailment of schools the school period has recently been reduced in many provinces from nine to seven years for both grades.

That the Soviet government should

undertake such a thorough system of education was to be expected. The work could hardly be postponed, for Russia's need for education is greater than that of any other civilized country today. No government in Europe is burdened with so many millions of ignorant illiterates who so easily fall prey to all sorts of superstitions and prejudices. The deliberate policy of the Russian Czars has been to prevent the education of the peasants, and especially those of the minor nationalities. Children of peasants, who constituted more than 80 per cent. of the population, had to go through all sorts of difficulties before they were permitted to enter the Russian "gymnazia," or secondary schools, which charged exorbitant fees. Only three to five per cent. of Jews were admitted to the Russian universities. There were nationalities in Russia that did not even possess a written language of their own, and no attempt was made to teach them the Russian language. One could have travelled scores of miles in Russia without having found a single school of even an elementary character. When the new government took over the power they inherited many provinces where the illiterate exceeded 90 per cent. of the population. The new government had everything to gain from a thorough educational system.

Soviet Russia could hardly avoid the inauguration of a completely new plan of education. It was forced to break entirely away from the old system—even to a greater extent than it had originally contemplated. There was little in the educational system of Russia that was worth while preserving. It was anticipated at the beginning that the Russian "Intelligenzia" was going to play a leading rôle in educational work. Had not the Russian intellectuals always displayed a keen interest in mass education, and had not many of them gone to the villages to carry on anti-Czarist propaganda years before the Bolshevik revolution had occurred? It was natural therefore to assume that they would cooperate in this work. These expectations however did not materialize. The educated class of Russia not only refused to work with the new government, but sabotaged the work all along the line. It refused to teach and take charge of school problems. In the early days of the revolution, the new rulers were naturally hasty and suspicious of the "Intelligentzia" and many excesses were committed. To the latter, the change spelled misery and suffering, and they therefore did not sympathize with the new regime. The All Russian Teachers' Association flatly refused to work with the new government, and the old officials of the department of education failed to report for their work.

In judging the failure of the original Russian educational program one must bear the preceding in mind. The revolutionary government was confronted with an unprecedented dilemma in the history of any country. Here was a task challenging the genius of the ablest organizers and educators. A. B. Lunacharsky, a literary and music critic of reputation, like Lenin and Trotzky, had just returned from exile with the advent of the revolution. He is easily the most talented and versatile of all the People's Commissars. The Provisional Soviet of Commissars instructed him to take over the management of the educational work in Russia. His chief assistant was Professor Pokrofsky, Russia's greatest historian of today. They did this, but found only empty rooms in the ministry of education and a completely disorganized and disloyal staff of teachers eagerly awaiting the coming of Kolchak, Denikin, and other enemies of the revolu-

tion. And this on top of the deplorably inadequate system maintained by the Czar.

In his attempt to organize Russia's school system, Lunarcharsky faced numerous other difficulties of a most serious character. Russia was in the midst of the most destructive internal and external wars. Pogroms, banditism, vandalism and counter revolutionary attacks and the blockade were causing havoc everywhere. The country was in a ruined state, lacking the commonest necessities for school purposes. Having failed to secure the cooperation of the old and trained educators, much of the work had to be done by persons lacking both experience and education, and frequently, ordinary intelligence. As a result the department of education could not also avoid the pitfalls—of bureaucracy, inefficiency and incompetence—which have characterized the administration of most other Russian government departments. It started out with a structure which was burdensome and top-heavy. Duplications of work were numerous even in the same departments. The red tape was stupendous. In his report for the year 1921, Lunarcharsky states that the central office spent 70 per cent. of its time upon deciding petty questions of local interest and internal significance. Only 30 per cent. of its time could be devoted to questions of policy which were of national importance.

It is to the great credit of Lunarcharsky and the group around him that despite these insurmountable difficulties they had succeeded during the first three years in increasing the number of schools by 50 per cent., with practically double the number of pupils in the first grade schools as compared with the number in such schools before the revolution. Even conceding that not all of the children attended regularly, and that many of the schools were ineffective, the mere fact that the department had registered in the first half of 1921, 76,589 schools of the first grade and over six million pupils, as against the less than 50,000 such schools and three million pupils under the Czar, is in itself a phenomenal achievement which could be possible only through the stimulus of revolutionary zeal and enthusiasm. Over 80 per cent. of the children from eight to 12 years of age were registered in schools, and whether they attended regularly or not, learned much or little, it was no mean accomplishment.

For reasons already indicated, much less progress could be made with the second grade schools, *i. e.*, for children from 12 to 17 years of age, although their number also increased as compared with prerevolutionary days. In 1919, only 9 per cent. of the children from ages 12 to 16 were attending school. This percentage declined in 1921, as the number of schools fell from about 4,000 in 1919 to 3,489 in 1921, and the number of pupils decreased from about 550,000 to 407,271 during the same period. In New York City alone, it is interesting to note, there are 187,208 children ages 14 to 17 attending schools, constituting more that 50 per cent. of the children of that age.

There are no figures available for the school year just passed, when, as will presently be seen, the greatest curtailment had taken place. A few figures obtained from the White Russian Department of Education may be considered as fairly representative of Russia as a whole. White Russia had good crops last year, and stretching along the Polish border has been more prosperous than many other provinces. The district of Minsk may be characteristic of the larger centers. The facts are as follows: In 1919 there were in this district 436 schools and 33,898 children. In 1921 these declined to 401 schools and 32,073 pupils. On January 1,

1922 there were only 217 schools and 15,643 pupils. In the city of Minsk, a representative of the department of education told me last March that they then had about 35 schools as compared with the over 100 schools in the fall of 1921. That no effort was made to enforce the compulsory education laws was obvious from the numerous children of school age one encountered selling things on all street corners in the cities, at all times of the day and night.

As time went on it became more and more evident that it was physically impossible to carry out the broad educational program undertaken by the department. For the latter had attempted an unprecedented program of education. The magnitude of its task may be realized when it is remembered that the work discussed here was only one of ten large fields of activity in which it was engaged. It undertook more activities than any similar department in the world. It did not content itself with the concern of school activities alone. It took charge also of the universities, technical schools, libraries, the theatres, the arts, and the music schools. It supervised the government publishing office, the newspapers, and had under its direction the official news agency, besides engaging in the abolition of illiteracy and many other cultural and educational activities. Besides furnishing free education it furthermore undertook to provide for the support of these schools from the funds of the central government, which is not done anywhere in the world. In addition it attempted to provide the children with the necessary school supplies, clothing, shoes and hot luncheons—an ambition some of our richest cities claim they cannot afford .

This however was in accord with the program of centralization of the early days. It was also in line with the Soviet doctrine that all persons capable of work owed their services to the government and that all peasant production above their own needs belonged to the government for the benefit of all. There was thus no need to require local contributions. It soon became evident, however, that with the impoverished and ruined state of the country the scheme could not be financed by the central government and that other sources were necessary.

With the introduction of the new economic policy which necessitated the establishment of definite budgets for all Commissariats and the approach of the famine, the situation assumed more threatening aspects. Bleak poverty gripped the nation. Schools were opened, but the teachers could not be paid, the students could not be provided for; there were no supplies, no textbooks to be had, and there was no writing material. The insufficiency of common necessities was stupendous. Because of the lack of buildings it was necessary in many places to run two or three and even more sessions daily in the buildings available. This naturally meant that the time had to be curtailed and much of the program could not be carried out. In the city of Kursk, for instance, of 47 schools, there were four sessions daily in one place, three sessions daily in six schools, and two sessions daily in ten other buildings. The school hours were reduced to a minimum. Twenty-eight schools conducted sessions lasting about three hours each, while nineteen others had sessions lasting only two hours. Of the 47 schools, 19 began their work only at the beginning of April, while two others did not start until the 25th of that month. Many of the government schools had to close up in the winter because of the lack of fuel. The lack of shoes and clothing further prevented many children from attending.

In a country, ignorant and beaurocratic

as Russia, it was inevitable that there should also be a lack of appreciation of the importance of education, even among government departments. Because of this and the numerous problems with which the government officials had to contend, there could be very little cooperation among the governmental departments. When, in 1921 after peace had been concluded, the Council of People's Commissars ordered all the Provincial Central Executive Committees to return all the school buildings which were occupied by hospitals, military units, and the like, as well as all the educational workers engaged in other work, to the Department of Education, the order was not everywhere obeyed. A classical case is that of the Central Executive Committee of the Province of Penza. When the latter was ordered to return the school buildings, it ignored the decree. The Provincial Educational Department kept on demanding the return of these buildings. It discontinued to do so, when it received the following letter from the above Central Executive Committee—the supreme provincial authority: "Stop your correspondence and don't waste your time in paper red tape or you'll be arrested as per administrative orders."

Another department in the same province refused to supply the Department of Education with 15 pounds of nails in order to put up stoves in the schools. The department naturally would not send any further appeals to the Executive Committee after the receipt of the letter, and the schools remained without stoves.

By the spring and summer of 1921, the conditions became intolerable. The situation was growing from bad to worse. An official investigation of the Children's Institutions and Schools carried on by the Commissariat of Workers' and Peasants' Inspection describes the conditions found in nearly two thousand schools of the first and second grade in the province of Twer —one of the most cultured and rich provinces—as follows:

"There is a crying insufficiency in school buildings. The lack of places is so acute that in 18 institutions the sick and defective children could not be kept apart from the healthy ones. The crisis in school buildings is such that one class in School No. 26 of Twer meets in the morgue. In several schools there were actually cases of fainting because of the overcrowded conditions. In some cases the schools closed altogether because of the bad conditions of the toilets. In 183 schools there are no toilets and the children run into the yard or into the woods. The school equipment is so insufficient that in a number of schools the children sit on the floor. Only 20 per cent. of the schools are fairly well equipped with furniture and other necessities. Only 4 per cent. of schools have a sufficient number of school books; 53 per cent. have absolutely nothing. The sanitary and hygienic situation is, of course, unspeakable. There are schools where the floors have not been washed for more than a year and this was in Twer itself."

The school supplies were diminishing gradually. While in 1920 there was requested for every pupil 96 sheets of paper, six pencils, 14 pens, and there was received for each pupil, 17 sheets of paper, one-twelfth of a pencil, and one-eighth of a pen, the receipts in 1921 were even less. There were received in that year only 6 sheets of paper, one-twentieth of a pencil, and one-tenth of a pen for each pupil.

I have myself visited schools in regions where food was in abundance, which were working only on days when it was fairly warm because of the lack of fuel, although thick woods were but a few miles distant.

These schools had no textbooks, no pencils, and the children were sitting in their hats and ragged coats, often with their toes sticking out from the bundle of rags in which they were tied. Students in the upper grades in the secondary school could not do any written work because they possessed no paper to write upon. The teachers, lean, pale, and pitiable-looking, exhausted individuals, in shabby clothes, told me that they were receiving hardly anything either material or spiritual. In March, their wages for the fall months had not yet been paid, and as these then were so low they would hardly buy a pound of bread, they cared little whether they got them or not. They had never even seen a copy of the Education Bulletin issued by the Department of Education, and this was in Minsk, capitol of the Federated Soviet Republic of White Russia, only about five hundred miles from Moscow, having plenty of food and buzzing with speculation and smuggling.

The conditions of the teachers were indeed most tragic. Many of them were reduced to the utmost despair. Teachers were literally starving, reduced to a state of semi-nakedness, and in at least one province a regular list was established reporting the number of suicides by teachers. Old, experienced pedagogues were compelled to leave their work and seek employment in government offices, on farms, on railroads, and the like, in order to secure some bread. They hired themselves out as farm hands, as laundresses, as housecleaners, seamstresses and shepherds. (In the province of Witebsk alone there were forty teachers engaged as shepherds). Many others became petty traders while still others were going around begging. The more daring women teachers took to the streets, while many others were spending their time in the jails and prisons for theft and robberies. (Bulletin No. 85, Department of Education, September 24, 1921).

The monthly report of only one district in a western province contained the following information. "School teacher H. Z. goes around begging." "The chairman of the Teachers Union A. G. not having seen bread for a month and a half became ill, after a meal in Children's Home R." "Teachers Z and T hired themselves out to peasants, having received bread in advance. Now they are employed on the harvest and threshing, but are receiving nothing and are hungry." "Teacher S went insane as the result of famine." "Teacher K died from starvation." "Teacher C cannot leave her room from weakness." (Bulletin 89-90, November 7, 1921).

Another head of a district educational department complaining to the Central Office wrote: "But we cannot reduce our girl teachers to beggary. I do not write about prostitution. These facts cannot be substantiated. They should never be permitted to be substantiated. . . ." He pleads with the department, "Comrades, dear comrades, help us, save us! for there are no more schools. There are no new ones, no old ones, nothing left." (Ibid). If these facts needed substantiation they were given official authority by Lunacharsky in his report to the Ninth Congress of Soviets in December, 1921. He declared: "The naked and barefooted army of teachers and educational workers is literally dying out of hunger and supporting itself by begging and prostitution."

Under such catastrophic conditions it was inevitable that many of the more cultured districts should feel alarmed and undertake all sorts of movements and plans for the improvement of the school conditions locally before the government

could do anything. The clamor to do something to maintain the schools went so far that it was openly advised to introduce tuition payments for school children and to lease the schools out to private persons. Indeed, in a number of provinces during the last summer the provincial educational departments themselves had leased out schools to private undertakings, established payment for education in government schools, or levied a tax upon the parents of the school children. Private schools also began to spread illegally, introducing again the old orthography and program of work. As the new economic policy was just being introduced and was as yet little understood, it was thought by many that this was in line with the new policy. The entire educational movement was panic stricken. The situation was a desperate one. Quick action was necessary. The government had to be relieved of carrying on its shoulders the entire burden of education.

The panic was quieted down and the situation was thought saved by a decree issued by the Council of People's Commissars on September 16, 1921. This now famous decree made it illegal to lease out schools to private persons, forbade the introduction of tuition fees and urged that the interest of the entire population be aroused in the work of the schools. It suggested the introduction of voluntary self-assessments for the villages, and the organization of economic School Councils in each district in the cities and small towns. The latter were to secure support for their schools by means of voluntary assessments, by collections, through the organization of "school weeks," by voluntary assessments of the parents of the children, and other such means. This, it was hoped, would secure the necessary support, and would relieve the government from supporting all the schools. The government was thus compelled to compromise on the principle of fully supporting the cultural and educational institutions of the country. It had to resort to the securing of assistance from the communities. The population, aware of the value of education, would certainly, it was expected, come fully to the support of this, and the conditions of the schools and teachers would be improved. There was certainly no small advantage in securing the interest of the local population in the problems of education. Much relief was therefore anticipated as a result of this decree.

Unfortunately, the new program met the fate of the many other naive Soviet programs which were based more on imagination than on realities. The decree of September 16 not only produced little improvement but actually made things worse, although it must be admitted that, in a few isolated localities, the conditions of the teachers did improve. The famine was doubtless a most important factor in this failure. The voluntary assessments, according to reports submitted to the All Russian Congress of Provincial Departments of Education last February, did not exceed on the average 22 per cent. of the needs. The response was very small.

Typical illustrations of the extent to which the decree was carried into effect in the various provinces were supplied by the department heads of the above convention. The province of Wologda reported that of 189 counties, voluntary taxation was accepted fully by 39, 37 accepted it partially, 75 counties refused, while from 38 others there was no information. The province of Pskoff collected 33,639 poods of different products. The program was to collect 125,000 poods. Petrograd province reported "Self assessments on the whole are progressing unsatisfactorily. Only the German colonies maintain their

educational institutions. In many places there were flat refusals to be assessed." The province of Novgorod was one of the best. It reported: "Of 137 counties, 86 adopted voluntary assessments; 33 adopted it partially, while 18 refused. Altogether collected 2,923 poods of bread and 10,000,000 rubles" (about $20.00 at the market rate in February). The province of Gomel reported that of 187 counties, 65 adopted the principle of self taxation in full.

The industrial provinces where the revolutionary proletariat is residing made the following reports. The province of Ryban reported: "Of 110 counties, 45 accepted the principle in full. In three districts nothing collected as yet. For the rest no information. In only one district was it expected to secure about 50 per cent. of the needs." Iwano-Wosnesensk reported as follows: "34 of the 101 counties accepted the principle. No information from the rest." Iaroslaw reported: "With the help of repressive measures there will be a collection of 100 per cent. in three districts." Kaluga: "About 35 per cent. collected."

Such have been the reports from practically all the provinces which had good crops last year—no attempt was made to carry out the decree in the famine regions. The peasants did not respond to any considerable extent. Where the principle was accepted the ration generally given the teachers was not sufficiently munificent to attract the most able persons to the profession. It averaged 1 pood (36 pounds) of flour; 7 to 10 pounds of cereal; 1 to 1½ poods of potatoes; and 2 pounds of fats per month. In a few places this was increased by a few eggs and perhaps a couple of pounds of meat. But these were rare. (Bulletin No. 92).

Many factors contributed to the lack of response. The country was exhausted and the peasants were impoverished. The government was compelled to take from them high taxes and they complained that this was just another form of taxation with which they were already overburdened. Many of them generally distrust the Soviet schools where religion is tabooed. "What kind of schools are these where even the fear of God is not taught the children?" asked the peasants. "It only spoils the children," they concluded and declined to support the schools voluntarily. In at least one province, the peasants demanded, as a condition of their support, the introduction of the Bible in the school curriculum. To this must be added the general apathy and ignorance of the great masses of Russian peasantry, who, although greatly stimulated towards educating themselves by the present government, still fail to appreciate the necessity of it. The workers, on the other hand, have little time to devote to the educational interests of their children when there is such a struggle on for the procuring of sufficient bread.

The educational department did not obtain the desired results to raise some of its funds in the localities. The department budget for 1922 was set at 32,000,000 gold rubles. In order to get along the department's force was reduced to the root. From nearly a million workers in 1921, the department was reduced to 513,000 persons, which was considered the minimum it could get along with. It decided to pay a wage of 3.33 rubles (about $1.75) per month per person, which would constitute one third of the monthly wages, while the other two thirds it hoped to pay out in products. This also did not materialize, and the department was continuously forced to change its plan of payment no sooner than one was decided upon. It did not take long to discover that to support 513,000 workers from the funds

assigned by the government would not suffice for three or four months at the most. The assigned money would hardly pay 50 per cent. of the wages. In January the department was given one and a half million gold rubles, while to pay out but 50 per cent. of the wages, four millions were necessary. In the middle of the winter Lunacharsky declared that the money assigned by the government was hardly sufficient to maintain 20 per cent. of the minimum of pre-war schools, let alone care for the new program of schools. (Bulletin 97, February 20, 1922).

The number of schools was continuously declining. According to Lunacharsky there were in the middle of the last year 85 per cent. of the First Grade Schools working as compared with the previous year in the normal provinces, and less than 60 per cent. in the famine regions. This undoubtedly was a rather optimistic statement, for schools were closing down everywhere, and but few remained in the famine regions.

The situation became so desperate that even Lunacharsky, the leading opponent of the establishment of private schools and the introduction of tuition fees, and unquestionably one of the ablest educational leaders in the world, was forced in a moment of despair to write an article in the official magazine of the department, admitting the necessity of the introduction of tuition payments at least in the schools of the Second Grade, and for the higher schools. For the Art and Special schools tuition had already been introduced. While he still opposed the introduction of payments in schools of the First Grade, he was ready to concede the necessity for such payments in the Second Grade, where, he contended, because of the poverty of the country, only the wealthier children could attend. He urged that a small percentage of the poorer children be admitted free. (Bulletin No. 97, February 20, 1922).

This was staved off by the All Russian Congress of Provincial Departments of Education which met in February, and which declared itself against the introduction of payments in the secondary schools. Instead it urged the adoption of a compulsory educational tax for all, and the reduction of the school period from 9 to 7 years.

Such has been the evolution of the Russian schools in the four years from 1918—the period of immense idealism and imagination—and 1922—a period when the realities could no longer be ignored and had to be faced. Whatever might have been the faults of the administration and beaurocracy of the department, no one can deny that it was a most noble undertaking and a task of Herculian magnitude. Its failure does not prove the fallacies of the new educational tendencies. Its success was prevented by the larger economic forces which lay outside its sphere—the ruinous wars, the blockade and the famine which have overpowered it. Its present state is one of terrible disaster. Its unfortunate position has brought Lunacharsky who was continuously child-like enthusiastic about the schools to declare recently: "I have long ago lost that more or less confident manner with which I used to talk to foreign interviewers, pointing to some of the achievements of our educational system as compared with the one preceding it. The new economic policy has shattered all these achievements, and now we can talk only of our poverty and misery, and only gently hint to the necessity of foreign help." Its future we may openly conclude, will largely depend upon the extent of our help. The latter can not be given too soon.

for the salvation of Russia, like that of any other country, lies along the road of widespread, free education.

ABRAHAM EPSTEIN
SOUTH BEND, INDIANA

OUR NEED OF AN INTELLIGENT ELECTORATE[1]

THE proposition that the rulers of a people should be educated needs no demonstration. Democracy, of all forms of government, is most in need of education. Its leaders must be discovered in the mass. They are not born to greatness, and greatness is not thrust upon them: they must achieve distinction and hold the support of willing followers. Herein lies the problem peculiar to democracy. In other forms of government, leaders are set apart by birth or divine right for the part they must play, but true democracy recognizes no privilege of class or sect or place. The new democratic ideal of education is not only to develop leaders but also to lift the whole mass, to make them fit to rule and to be ruled by leaders of their own choosing. The safety of a democratic state, therefore, rests in its final analysis upon an enlightened body of citizens.

In our government all citizens may participate in elections, but political power passes over to officers who represent at best merely a majority of electors. Even a determined minority may hold the balance of power and have their own way, regardless of public opinion. Indeed, it is common observation that public opinion is shaped by skillful propaganda along lines at first desired by few, but ultimately accepted by many. In this way, we get our constitutional amendments and so, too, we fortify the sway of political bosses. A superficial view of our government, therefore, might easily lead to the conclusion that it is really not a democracy, but an oligarchy. The inference follows that if rulers are few, our best educational course is to recognize our aristocracy and accord it appropriate honors.

This superficial view is responsible for most of the ills in American education. When power belongs to few, why trouble about the education of the many? Time, labor, and money may all be saved by limiting the scope of effort. This was precisely the view taken when our provincial schools were established for the training of leaders of Church and State. It was a direct inheritance from our English ancestry. Patriarchal and tribal government promoted its development. It was hoary with age when Assyria and Egypt found it adapted to their needs. It attained perfection in Greece, and survived for centuries in Rome. It has made modern Europe, and has come down through the centuries to our own day in perfect form in China. It is a system that aims to give leadership to a privileged class, to help up a few, and to keep the many down, to promote some to positions of authority, and to make the masses contented with that position in life to which it has pleased God to call them. It has begotten in America a scheme of education controlled from the top downwards; it accounts for the inclusion in our curricula of materials designed to function only in the lives of the select few; it has shaped our system of school administration according to the whims of local pride and passion; it gives employment to incompetent teachers; it breeds distrust and suspicion between the schools and the public that they should serve. In a word, the theory that government is safe when leaders are competent is traditional in this country. The time is coming when we must rid ourselves of the notion that an aristocracy, even an aristocracy of intellect, is a safe guide in American education.

[1] Presented before the National Education Association, Boston, Mass., July 6, 1922.

If training for leadership, or rather opportunities for training leaders, were a sufficient guarantee of the safety of the state, we should be living in a political millennium. Nowhere else in the world is provision made for so many aspiring candidates for leadership, or for so many different kinds of leaders. We have erected technical schools for almost every conceivable type of professional worker. It is a long and imposing line from schools of theology and law, through medicine and engineering, to agriculture, business and the household arts. We boast of our educational ladder reaching from the gutter to the university, and we take pride in the numbers that cling to it. The wonder is that so few who reach the top show any gratitude to those who built the ladder and helped them to climb it. Whatever the fault, the fact is that those who owe most to public support are not rendering to the public the service that the public is entitled to receive.

Coincident with the extraordinary increase in the past few years of those seeking higher education is the increasing distrust of the integrity and unselfishness of those best equipped to lead. In fact, expertness in technical lines is no longer synonymous with leadership in professional service. The common man dreads the lawyer as the burned child dreads the fire. The leader of hundreds of thousands of labor unionists voices their sentiment when he says "God save us from the courts." Some millions of Protestant churchmen show their estimate of the worth of religious leaders when they fix the average salary of a clergyman at $800 a year. There are more readers of newspapers, with less faith in what the papers print, than ever before in our history.

This distrust of leaders and the denial of authority that leadership implies is reflected in the prevailing social unrest, the recent outburst of crime and the general disposition to lawlessness in all sections of our country. The popular remedy is to enact more specific laws and to insist on more rigid enforcement of police power. But it is just such conditions that government is designed to meet. Our constitution provides the foundation upon which just and equitable laws may be based. And with just and equitable laws, a democracy is safe, *provided the people will observe the laws.*

Leadership implies a following. Leaders may be never so wise, never so capable, never so patriotic, but if they have no following, their wisdom, their ability, their patriotism goes for naught. The safety of the state depends quite as much upon obedient followers as upon efficient leaders.

And many are the expedients recorded in history for securing an obedient following. Fear of marauding foes has always been a potent force, and the bogy of eternal aggression is paraded on occasion even in our own halls of Congress. The wrath of the gods has often been invoked with great success. Military discipline has played its part. The amelioration of popular discontent has repeatedly been sought in largesses of food, land grants and wage adjudications, but history shows that such efforts are but the first signs of national decadence. And strongest of all forces in securing a submissive following is custom embodied in tradition and reinforced by poverty, caste and class distinctions. The world over to-day—barring our own land and certain British commonwealths—the masses of the people do what their parents did and what others of their class are accustomed to do. Just as the exercise of habit induces a certain degree of satisfaction in the individual, so conformity to custom begets contentment in society.

The problem, as I have stated it, when restricted to the safety of the state, is twofold: the training of efficient leaders and the securing of contented followers. The

training of leaders devolves more and more upon our colleges and special schools. Every such school that I know is striving to improve the quality of its output. Curricula are being strengthened and methods of teaching bettered. Standards of scholarship are being raised by demanding both broader culture and more scientific knowledge. Add to these attainments the spirit of patriotic service, and the professional schools of America will have done their full duty.

The second part of our problem—namely, the training of followers—is the more difficult of solution. For us in America it is not only the most imperative, but it is the most baffling because the least understood and the least appreciated. Its magnitude is measured by millions of children and other millions of adults. Its complexity is intensified by widespread illiteracy and the infusion of foreign languages, customs, and traditions. And for its solution we have no satisfactory body of knowledge and no accepted system of instruction. The character of our school work in the past, even in the public schools, has been formulated according to the needs of those who are going forward to positions of leadership.

What are we going to do for those left behind? Can anything be done that will make for the safety of the state? Is it possible through schooling to contribute to the contentment of the masses? My answer is that just because it must be done, it can be done, and will be done, by the school teachers of America.

I should be less confident of my answer, were it not that we have before us the most conspicuous example of the efficacy of public education that the world has ever seen. It is an example that warns us what to shun as well as an example that inspires us with courage to proceed. I refer to the German system of popular education as developed during the past century and brought to fruition in the world war.

A century ago Germany was a poverty-stricken, quarrelsome, politically distracted country. They had a few capable leaders, but the masses of the people were intractable and belligerent. There was no harmony in ideals, no unity in endeavor. But from her poverty, Germany erected universities for her leaders, and public schools for the masses. She developed a teaching profession that has had no equal in scientific attainments or in loyalty to the state. She gave those teachers high social rank, paid them well for their services, and supported them in old age. They in turn upheld the standards of the realm and converted, within two generations, the self-indulgent, easy-going, individualistic Teutonic stock into obedient subjects of a ruthless military despotism. So thoroughly was this schooling done that dependence upon authority became the cardinal virtue of the German people. The masses were molded into one mighty machine, contented at home, efficient in business, and equally fitted to fight their way in world industry or a world war. And however we may laud the rest of the world for their prowess in checking German aggression, a dispassionate judgment will not accord the victory solely to the military superiority of the Allies. Germany was not defeated in battle. She lost the war because her soldiers and the masses back of them lost confidence in their leaders. The whole superstructure of the state crumbled when its foundations were undermined.

From our standpoint, we see in the German system of education and in its logical outcome in the war a horrible example of what not to do, but we must be impressed

with the fact that Germany has demonstrated that a vast population can be molded by education into the likeness of an ideal, even though that ideal, when realized, turns out to be not a god, but a golden calf. What German teachers have done, American teachers can do. We can set up an ideal characteristically American, and we can realize it, if the public will give us the necessary support. Not blind obedience, but voluntary cooperation shall be our watchword. We shall seek contentment through intelligent exercise of our individual talents, and find happiness in the possession of our own attainments.

I grant that our problem is infinitely more difficult than the one submitted to German teachers. It is far easier to quench ambitions than to rouse them and direct them aright. Never before has a nation been founded on the proposition that all men are created equal, and nowhere in history has intelligent self-direction been set up as a national ideal of education. It may well be doubted that such an ideal is possible of realization. Our own experience should make us skeptical of its practicability. When only four or five in the hundred of those who begin the climb of our educational ladder ever reach the top, what of the attitude of those dropped by the way? Should those who fail through no fault of their own be expected to rejoice in the success of their rivals? Is human nature so constituted that superior ability when denied its chance will acquiesce in the leadership of inferior talent? How can contentment be secured under a system of free competition without that equality of opportunity which we laud in theory but neglect in practice? Difficult as our problem is, I do not despair of its solution. My faith is confirmed by the righteousness of our cause.

Up to this point I have been reckoning with conditions as they are rather than with things as they might be. I have tentatively accepted the doctrine that the whole educational problem of statecraft is the training of efficient leaders and contented followers. But this dichotomy of the educational process is purely logical. Leadership is a relative matter. Every normal human being may be at once leader and follower. I may excel in some particular, but there are a thousand things that others can do better than I can. Most of us take our religion ready-made. We depend upon the press for most of our current information. The wisest of us consult reputable physicians when we need medical advice, and much as we dread the lawyer, we do go to him when we get into legal trouble. And for food, shelter, and clothing we are dependent upon those who have the technical skill to do that which is beyond our range. Independent we may be in some small way, but in the large, our lives are bound up with others. If only we knew how to choose our leaders, and had the grace to follow them as we expect to be followed in our own specialties, we should soon arrive at a social millennium. And here is the clue to our educational maze. Leadership is expert service rendered to appreciative recipients. It is the interplay of service and satisfaction that begets mutual understanding and bridges the gulf between leader and follower. Expertness, mere efficiency, therefore, should not be the sole object of vocational training.

We earn our living by the skills that we possess, but we spend our lives and our substance in getting the fruits of others' labor. In every article purchased, in every acquisition, whether for pleasure or for profit, a choice is made, and back of that choice stands our own valuation of the worth of an expert in a field not our own. A sympathetic understanding of our social and

economic problem is unthinkable, so long as half of the world is ignorant of how the other half lives. We need more knowledge of what men do and what they get from their labor, more information on what constitutes values in terms of our own needs. The editor of a popular magazine has recently told his readers that "after all, economics is little else than the study of man as he goes about his daily tasks of sowing, reaping, hiring out his labor or engaging that of others, trading, mining, manufacturing, buying, selling, renting, transporting the products of his own hands or of the soil, doing his best to keep a tight roof over his head and straining every nerve to provide for his children and to create some overplus of savings wherewith to stake other men who would engage in enterprises not immediately productive. If there be any study more homely, more democratic than this, any that clings closer to the soil or lies nearer to man's bone and marrow, it would be hard to name." I should hesitate to suggest this addition to the curriculum of our public schools, if I did not think that much of what is now taught could profitably be displaced. I wonder why it is that we teach with such complacency the life history of the honey bee and the humming bird, the brook trout and the woodchuck, and fail to include in our study the life history of the coal miner and the fisherman, the cotton planter and the dairyman, the textile worker and the engineer. More knowledge of things that count in everyday life is the chief desideratum in that phase of education in which people should be taught to follow expert guidance.

There is a corollary to this proposition that from the standpoint of public safety is more significant than the main thesis. It is this: The ability to give expert service brings its own reward. The man who can do something well is sure to take pride in his handiwork; pride in his work will keep him everlastingly at it; industry backed by skill insures a living that satisfies, and leads to a competency of possessions that must be guarded. The ability to give an honest day's work, whether in professional pursuits or in manual occupations, is the first step in the evolution of the conservative citizen. It is a standing invitation to all onlookers to admire and to emulate. It begets leadership and that joy in work that relieves labor of its drudgery. In such a case, the job seeks the man and pays him his price. It makes him, however humble his trade, a capitalist, who has need of an education that will enable him properly to care for his income and invest his savings. In this direction lie social well-being and civil order. Vocational training is the stepping-stone, and not until every available person is provided with the means of becoming an expert worker, and trained to enjoy the income of his capital, shall we have that equality of opportunity which is the birthright of all Americans.

If the topic assigned me implies that an intelligent electorate is necessary only in respect to the choice of political leaders, it does not go far enough. Legislation and administration of government under law are necessary functions of society, but unless the letter of procedure conforms to the spirit of progress, there is no assurance of safety to the state. My view is that the right spirit comes from enlightened public opinion that voluntarily chooses to follow expert guidance in every phase of life.

Furthermore, I denounce as un-American the notion that our leaders constitute an aristocratic class entitled to superior advantages and privileged to exploit those less fortunate. When it is conceded that each normal person may be a leader in his own way, class distinctions disappear, and the only honor

that is justified is the respect paid to work well done. If this world is to become a better place to live in and life made better worth living, we must accept the Christian doctrine that service is the only true criterion of greatness.

Democracy, of all forms of government, is, as I have said, most in need of education. It must have leaders, both priests and prophets, not only those who work in the present, but also those who have a vision of the future. No education that can be given is too good for those who will use their powers in the service of mankind. No sacrifice is too exacting, if thereby those in need of guidance get the help they should have. Confidence in the integrity and unselfishness of leaders is the first essential in the democratic program of social reform.

The other factor I have stressed at greater length because it is foreign to popular belief. The maintenance of civil order and social security logically precedes the rise of leaders. Unless one can work unmolested and be assured of the fruits of one's labor, there is no incentive to effort. Happy is the land where peace prevails. Contentment is a public blessing worth striving for.

It is obvious that at times and with certain groups of our population, we have tried every known means of securing respect for law and order. Even the hope of happiness in a heavenly state has been preached as adequate recompense for ills suffered in this life. Military discipline has been imposed at times of national peril, and our people have cheerfully borne its restrictions. Unbounded faith in the ultimate working together for good of all things American has made many of us incorrigible optimists. We acquiesce in decisions reached by unfair means in the expectation that time will bring a change.

There are signs, however, that our people will not long remain as docile as they have been in the past. Population is shifting from the country to the city. Elbow room is growing less. Competition is getting keener, and every year makes it harder for some to maintain a decent standard of living. The Old World with its woes stands begging at our doors. Discontent is spreading like a fatal disease among great groups of our citizens. This tendency, unless checked, can have only one result; our experiment in democratic government will surely fail, and with it, the hopes of a world worn out with travail of new-born ideals of freedom. The outcome rests with the teachers of America—teachers in the public schools, teachers in the colleges and universities, teachers in the press, teachers in the home and in the church, teachers in business and teachers in industry. There is no greater patriotic service. Are we ready to do our share?

JAMES E. RUSSELL

TEACHERS COLLEGE,
COLUMBIA UNIVERSITY

EDUCATIONAL EVENTS

THE PROBLEMS OF ENGINEERING EDUCATION

THE current issue of *Engineering Education* contains the report of the committee appointed at the meeting of the Society for the Promotion of Engineering Education at the University of Illinois last June to formulate an answer to the question, "What can the society do in a comprehensive way to develop, broaden and enrich engineering education."

The question was raised by Professor Charles F. Scott, in his address as president of the society, who declared: "In engineering education we have emphasized the 'engineering' and neglected the 'education,' we have emphasized the technical knowledge and the practical experience of the young instructor and have neglected his ability to teach—not merely to impart knowledge but to train and develop the student."

In their report the members of the com-

mittee state that the question asked "involves two fundamental inquiries: A. What the engineer graduate should be. B. What the training of the engineering student should be and the influence surrounding him." To carry forward a comprehensive investigation of these matters the committee recommends the creation within the society of a Board of Investigation and Coördination. "The instrumentalities of this board would be a staff of investigators in charge of a director, and a body of counsellors embracing representatives from the several fields concerned in the investigation. There should, for example, be representatives from the U. S. Bureau of Education, the professions, the industries, the National Education Association and the public." President Scott is recommended as a member of the board, with authority to appoint the other members, whose initial terms shall be five, four, three, two and one year respectively, the individual assignments being made by lot. The specific objects for which the board is created are thus expressed by the committee:

1. To ascertain the facts in engineering education, such as concern (*a*) teachers, their origin, training, experience and effectiveness; (*b*) teaching facilities; (*c*) curriculums; (*d*) students and graduates, their origin, training, experience and effectiveness.

2. To ascertain present and future requirements in the fields served by engineer graduates.

3. To present the facts and requirements for their bearing on the training of the engineer to the end that he may (*a*) develop himself and his profession; (*b*) realize and fulfill his obligation to society.

4. To maintain close contact with engineering schools enabling them to participate in the investigations, and reporting to them from time to time, to the end that the developments may be continuous from the initial contact between the colleges and the agencies of the board.

5. To secure the necessary funds for these purposes.

The members of the committee are M. E. Cooley, J. H. Dunlap, D. C. Jackson, F. W. McNair and C. F. Scott, *chairman*.

Another activity concerned with the problems of engineering education is the work being done by a Joint Conference Committee on Engineering Education, composed of representatives of the S. P. E. E. and of the National Industrial Conference Board. The statement of M. W. Alexander, managing director of the latter organization, is that:

The committee is not concerned with details of college curricula, but with the broader aspects of the problem, such as the best way of fitting the graduate of the engineering schools into industry; whether and how best to give the student industrial training coincident with his academic studies; an adequate supply of high-grade instructors and a better understanding of their responsibilities by both industry and the engineering schools.

THE OKLAHOMA STATE EDUCATIONAL SURVEY

THE United States commissioner of education announces the following members of the survey staff, approved by the Oklahoma State Survey Commission:

From the United States Bureau of Education:

Dr. William T. Bawden, assistant to commissioner, director of the survey.

Dr. George F. Zook, chief, Division of Higher Education.

Mrs. Katherine M. Cook, chief, Rural Schools Division.

Dr. Willard S. Small, chief, Division of Physical Education and School Hygiene.

Mrs. Henrietta W. Calvin, specialist in home economics.

William R. Hood, specialist in educational legislation.

Miss Maud C. Newbury, assistant in rural education.

Lloyd E. Blauch, specialist in charge of land-grant college statistics.

Major Alex Summers, collector and compiler of statistics.

From outside the United States Bureau of Education:

Dr. Frank L. McVey, president, University of Kentucky, Lexington, Ky.

Dr. Raymond M. Hughes, president, Miami University, Oxford, Ohio.

Dr. Fletcher Harper Swift, professor of education, College of Education, University of Minnesota, Minneapolis.

Ralph Bowman, consulting accountant and member of staff of United States Bureau of Efficiency, Washington, D. C.

J. W. Gowans, superintendent of public schools, Hutchinson, Kansas.

Dr. E. E. Lewis, superintendent of public schools, Rockford, Illinois.

George A. Works, professor of rural education, Cornell University, Ithaca, New York.

H. B. Peairs, chief supervisor of education, United States Indian Service, Department of the Interior, Washington, D. C.

Dr. Thomas Jesse Jones, director, Phelps-Stokes Fund, New York City.

Walter B. Hill, state supervisor of negro education, State Department of Education, Atlanta, Georgia.

The first meeting of the survey staff will be held at Oklahoma City on Monday, October 16, 1922. On Monday evening the members of the staff will meet with the governor and the Oklahoma State Survey Commission for discussion of the plans of the survey.

The field work will start the following day, October 17; meetings of the survey staff will be held in Oklahoma City each Saturday, the field work closing with a final meeting of the staff on Saturday, November 11.

The survey will cover the following topics:

1. State educational legislation.

2. General problems of organization and administration of the state system of public schools; activities and functions of the State Department of Education.

3. State system of taxation; school revenues.

4. Expenditures for public education; school accounting and reporting.

5. Special problems of the rural schools; activities and functions of the county superintendent of schools.

6. Special problems of urban schools.

7. Sources of supply and professional preparation of teachers.

8. Special problems of higher education.

9. Special problems of state educational institutions of secondary grade.

10. Special problems of physical education and school hygiene; health of school children.

11. Special problems of the government Indian schools.

12. Education for negroes.

A comprehensive series of tests of school children in a number of selected counties was given last spring by a committee of Oklahoma educators, headed by Dr. W. W. Phelan, dean of the College of Education, University of Oklahoma. The committee used intelligence tests as well as standardized tests in several school subjects. The Bureau of Education has also tabulated returns from a questionnaire filled out by Oklahoma teachers, giving information concerning education, professional training, experience, age-grade distribution of pupils, and the like. Summaries of the data gathered by these two methods will be available for study by the survey staff before the field work begins.

The 1921 Legislature of Oklahoma passed an act appropriating $20,000, and providing for a survey of the state system of public education by educational experts "chosen from recognized authorities without the state," including "as many as possible from the National Bureau of Education." (Sec. 3, S. B. 19, Special Session 1921.) Governor J. B. A. Robertson appointed the following members of the commission: Hon. Robert H. Wilson, state superintendent of public instruction, *chairman;* George F. Southard, Enid; Charles L. Brooks, McAlester; J. A. Duff, Cordell; Cyrus Avery, Tulsa. Later, J. S. Vaughan was appointed executive secretary.

At a meeting of the commission, held in Oklahoma City, January 2-3, 1922, a resolution was adopted inviting the U. S. Bureau of Education to conduct the survey, to submit a budget of expenditures, and to nominate the members of the survey staff.

Later, upon request of Governor Robertson, an invitation was extended through the secretary of the interior to the Bureau of Indian Affairs to cooperate with the survey in a study of the government Indian schools in Oklahoma. In accepting this invitation, Commissioner Burke named H. B. Peairs, chief supervisor of education, to represent the Indian Bureau.

MORE ABOUT "TOO MANY IN COLLEGE"

STATEMENTS by President Hopkins of Dartmouth to the effect that there are "too many now in college," quoted in these columns last week, have called forth comments by other college and university executives. Acting Provost Penniman told the University of Pennsylvania students that no policy should be adopted that

excluded men and women from securing higher education. He said:

When we are obliged to turn away applicants because we can not provide for them it is necessary to adopt some method of selecting the entering class. Various methods have been proposed for accomplishing this difficult task. To the right to "life, liberty and the pursuit of happiness" is now being added apparently the "right to a college education," unless we regard that as included in "the pursuit of happiness."

No American institution, unless private and restricted, has the right to adopt a method of selecting candidates that in any way violates the principles laid down in the Declaration of Independence or the rights of American citizens as guaranteed by the Constitution of the United States. To do this is to be un-American in policy, and there is imperative need at this time to preserve the American character of our institutions and to send forth the graduates better and more loyal Americans, if possible, than when they entered.

In opening the one hundred and fifty-ninth year of Brown University President W. H. P. Faunce said:

The trouble is not so much that too many men are going to college as that often the wrong kind of men are going and that an impersonal written examination given thousands of miles away by men who never saw the student and do not wish to see him affords no knowledge as to whether that student will benefit by four years of residence at a distant college.

All young men and women who want education ought to have it. But the vast majority would profit far more by some other kind of education than that given in the traditional American college.

Every large industrial enterprise now maintains its school for the education of employees. Our largest banks are giving their clerks certain hours for study. The Y. M. C. A. is turning to instruction as well as inspiration and every modern church is a school of religion. Every man should be educated, but only a minority are mentally or morally benefited by seclusion for four years within the gates of Oxford and Cambridge or the American colleges which are based on the English model. England has solved the problem not by building more Oxfords but by developing other types of training, and we must do the same thing.

A NEW YORK CITY SCHOOL SURVEY

SUPERINTENDENT WILLIAM L. ETTINGER, of New York City, has announced his plans for a city wide survey of the school system by committees of the supervising and teaching staff. The following are the committees in charge, as reported by the school editor of the New York *Evening Mail:*

Committee on high schools: Clarence E. Meleney, *chairman*, William A. Boylan, John S. Roberts, Lizzie E. Rector and John L. Tildsley.

Topics for study: "The Relation of High Schools as at Present Organized to Both Elementary and Junior High Schools," "Source of Teacher Supply and Effect on the Elementary Schools," "Problem of Congestion in Relation to Both Junior High and Elementary Schools," "Types of Double Session and Part-Time Programs," "Courses of Study," "Classification of Pupils," "Regents' Examinations," "Relation of Discharges to Failures in Certain Subjects," "Mode and Effectiveness of Supervision."

Industrial and vocational work: Gustave Straubenmuller, *chairman*, William O'Flaherty, Louis Marks, Florence M. Marshall and John E. Wade.

Topics for study: "Organization of Bureau of Vocational Activities," "Kind and Amount of Expansion of Industrial Work to Meet the Needs of the System," "Source and Classification of Pupils in the Present Schools," "Present Curricula," "Effectiveness of Instruction in Academic Subjects," "Effectiveness of Present Supervision," "Relationship of Present Bureau to the Equipment and the Administration of Continuation Schools to Trade Courses in Evening Schools, to Industrial Work in High Schools, Day and Evening," "Relationship of Bureau to Advisory Council."

Study of junior high schools: *Chairman*, Gustave Straubenmuller; William A. Boylan, James M. Edsall, Cecil A. Kidd, Benjamin Veit, John S. Roberts, John L. Tildsley, Joseph K. Van Denburg.

Topics for study: "Problem of Cooperation and Articulation between the Elementary Grades That Feed the High Schools and the High School Grades That Receive the Junior High School Pupils," "Classification of Pupils," "Development of Curriculum," "Rate of Progress of Pupils," "Holding Power of the Organization," "Success of Pupils in High Schools," "Effect of the Junior High School on Congestion in Ele-

mentary Schools and in High Schools," "Mode of Supervision," "Advisability of Further Extension of the Junior High School Organizations."

Grading and course of study: *Chairman*, Edgar Dubs Shimer, Louis Marks, William McAndrew, Edward B. Shallow, Thomas O. Baker, Stephen F. Bayne, John P. Conroy, Cecil A. Kidd, James Lee, Charles W. Lyon, James J. McCabe, Joseph H. Wade, Clarence E. Meleney, William J. O'Shea, John T. Nicholson, Margaret O'Connell, Ellen A. G. Phillips, Lizzie E. Rector, James J. Reynolds, Joseph S. Taylor, John E. Wade.

Continuation schools: *Chairman*, William McAndrew, George H. Chatfield, William A. Hannig, Florence M. Marshall, William O'Flaherty, John E. Wade.

Compulsory education law: *Chairman*, Edward B. Shallow, John H. Walsh, John W. Davis.

AMERICAN EDUCATION WEEK

AMERICAN education week has been set for December 3 to 9 inclusive, it was announced last week by Garland W. Powell, assistant national director of Americanism for the American Legion, which inaugurated the movement last year and which is receiving the cooperation of the United States Bureau of Education and the National Education Association.

The announcement followed a conference between President Harding, Powell and John J. Tigert, United States commissioner of education. Mr. Harding, in promising his full support, said he will issue a presidential proclamation, which is to be followed by similar ones from governors and mayors.

The state and county superintendents of public schools will be requested through the United States Bureau of Education to devote the week to the American Legion's program, which will begin on Sunday, December 3, when ministers of all denominations will be urged to preach sermons either morning or evening on the benefits of education. Mass meetings also will be held throughout the country at which speakers supplied by the American Legion will give addresses on the subject.

BETTER SPEECH WEEK

THE second week in November is recommended for the observance of "Better Speech Week" by a joint committee of the National Council of Teachers of English, the National Association of Teachers of Speech, and the General Federation of Women's Clubs. The committee, which has just been organized, advises two such weeks, the second during the third week in February, and adds, "The February observance is to be preferred for schools."

The chairman of the new committee is Professor Glenn N. Merry, of the State University of Iowa.

A preliminary statement of the general policy of the committee follows:

The committee recognizes that our language is not fixed and dead, but living and subject to constant change; that two general standards of usage exist, good English and vulgar English, and that the usage by the educated class should set the standard of American speech.

The policy of the committee is determined by a broad ideal of avoiding purism, fadism, and artificial speech on one hand and vulgarism on the other.

The committee believes that distinctness of utterance and agreeable voice quality are achievements in speech worthy of cultivation.

The committee seeks to cooperate with all forces emphasizing the usage of distinctly and agreeably spoken standard English in America.

The committee feels that training in effective speech presents one of the best methods of developing personality.

The committee recognizes and appreciates the stress now being placed in public schools upon the use of acceptable English, and seeks to encourage emphasis upon speech improvement *throughout the entire school year.*

THE UNIVERSITY OF OKLAHOMA AND THE KU KLUX KLAN

DR. STRATTON D. BROOKS, president of the University of Oklahoma, sent to the members of the faculty of the institution on September 16 a statement of which the following is an official copy:

Since the university is a non-political institution supported by all the people of the state, it is important that the members of the faculty and the employees of the university refrain from active participation in politics. Your attention is called to the following resolutions passed by the board of regents:

"It is the policy of the board of regents not to grant the use of university buildings for the

purpose of holding political meetings addressed by candidates for office, or in the interests of candidates for office." (Passed March 8, 1920.)

"Owing to the controversy that exists throughout the state in connection with the Ku Klux Klan and the Anti-Ku Klux Klan, and the dependency of the university upon retaining the good will of all factions and parties, we believe it unwise for members of the faculty or employees of the University of Oklahoma to place themselves in a position where they will need to take active part in such controversy." (Passed April 20, 1922).

"The board of regents condemns active participation in politics, and directs that no teacher or employee of the University of Oklahoma shall engage in such political activity and in so doing shall be subject to dismissal from the service of the institution." (Passed August 15, 1922).

THE DEPARTMENT OF SUPERINTENDENCE TO MEET AT CLEVELAND

SECRETARY S. D. SHANKLAND, of the Department of Superintendence, National Education Association, announces that the department will hold its February meeting in Cleveland.

The department had planned to meet in Chicago again this year, but space in the Leiter Building, where Dr. Condon's building exhibit and other features were to be located, was found to be unavailable, and it was decided to turn the convention to Cleveland, where there is a new public auditorium.

EDUCATIONAL NOTES AND NEWS

DR. SAMUEL PAUL CAPEN will be inaugurated chancellor of the University of Buffalo on October 28.

DR. WILBUR LUCIUS CROSS, Sterling professor of English and dean of the Graduate School, has been appointed acting provost of Yale University.

HENRI HAUSER, a distinguished French historian who teaches economic history at the University of Paris, has been chosen on the nomination of the French government to serve as French exchange professor at Harvard during the second half of the current year, while the Harvard emissary to France will be Irving Babbitt, professor of French literature.

THE inauguration of Dr. Charles Wesley Flint, chancellor-elect of Syracuse University, will take place on November 17.

PROFESSOR JAMES DRYDEN has resigned as head of the department of poultry husbandry at the Oregan Agricultural College, to go into the commercial poultry field.

AMONG new members of the faculty of Howard College, Birmingham, Ala., are Dr. Mitchell B. Garrett, of Cornell, who is professor of history, and Dr. L. K. Oppitz, of Shorter College, who is professor of physics.

DR. HEBER REECE HARPER, chancellor-elect of the University of Denver, takes charge of the university on November 1, although his inauguration will not take place until later.

E. B. CAUTHORN, formerly principal of the Forest Avenue High School, Dallas, has been made high school supervisor of the schools of Dallas, succeeding Dr. Lee Byrne. The *Texas School Journal* also states that Julius Dorsey, until recently principal of the Reagan school, has been made supervisor of intermediate work, with J. F. Peeler.

PRESIDENT WILLIAM OXLEY THOMPSON, of Ohio State University, will deliver the principal address at the Founders' Day celebration at Baldwin-Wallace College on Friday, October 13.

PROFESSOR ADDISON VAN NAME, active librarian of Yale University for 40 years, and widely known to graduates down to 1904, when he retired, died at New Haven September 29. Professor Van Name, who was 87 years old, was the last of faculty scholars of the pre-Civil War period.

PROFESSOR MAX HOYER, of Clarkson College, was killed in an automobile accident near Potsdam, N. Y., on September 22.

PROFESSOR HENRY B. LONGDEN, head of the Rector Scholarship Foundation at De Pauw University, has made public the names of the awards of Rector scholarships for the coming year. The list carries 138 names, and a number may be added later. Through the munificence of Mr. Edward Rector of Chicago, 400 free scholarships were established several years

ago. These scholarships are open to young men graduates of the high schools of Indiana who rank high in character and excel in scholarship, and continue through the four years' course if the work of the student justifies the continuation. They cover all tuition and fees, both departmental and special, in the College of Liberal Arts, amounting on the average to about $125 a year.

HORACE MATHER LIPPINCOTT, secretary of the General Alumni Society of the University of Pennsylvania, was quoted by the Philadelphia *Evening Public Ledger* as saying that the reported nomination of Senator New to be governor general of the Philippines "confirms the good news that General Wood certainly will come to the university. We have no reason to believe that the general will fail to keep his engagement to be at the university by the first of the year."

THE University Committee of the Council of Church Boards of Education in the United States was the guest of the Board of Education of the Methodist Episcopal Church on Friday, September 22, at an all day session. Among the topics which came up for discussion were Summer Conferences on Religious Education, Cooperative Student Pastorates, and the relations between the Churches and the Y. M. C. A. Those present were: Dr. Robert L. Kelly, executive secretary, and O. D. Foster, associate secretary, of the Council of Church Boards of Education; Paul Micou, of the Department of Religious Education of the Protestant Episcopal Church; Warren F. Sheldon, assistant secretary of the Board of Education of the Methodist Episcopal Church; G. R. Baker, associate secretary, Baptist Board of Education; J. C. Todd, Board of Education of the Disciples of Christ; Frank M. Sheldon, Congregational Education Society; C. P. Harry, of the United Lutheran Church; H. I. Stock, Congregational Education Society, and M. W. Lampe, of the Presbyterian Board of Education.

THE total budget for the University of Texas, as submitted to the board of control, calls for $1,845,000 for each of two years. The appropriation asked by the College of Industrial Arts for the first year is $874,551 and for the second year $746,167. The A. & M. College asks $1,744,043 for the first year and $1,720,179 for the second year. A supplementary budget for A. & M. asks $999,945 for experiment station work, $502,221 for extension work, $735,803 for Grubbs Vocational College, $1,150,592 for John Tarleton College, and $749,292 for Prairie View Normal for negroes, according to the *Waco Times-Herald*.

OF 1,100 students in the Woodlawn High School, Birmingham, Ala., about 700 suffered more or less seriously from the effects of food poisoning on September 27. It is believed that the students became ill because of eating sandwiches at the school cafeteria made from ground beef, cabbage, celery and pickle.

DISCUSSION

OCCUPATION-INTELLIGENCE STANDARDS: A REPLY TO MR. FRYER

IN the September 2 issue of SCHOOL AND SOCIETY, Mr. Douglas Fryer gives an interesting chart of the results of the intelligence tests in the army draft, under the above title. Not being satisfied to take his conclusions at a glance, I plotted his figures in the form of a diagram, and studied the chart for possible conclusions.

Mr. Fryer looks at the facts from the point of view of placing boys in the various occupations. I more naturally take the view of finding boys for available jobs, for the selection of boys to learn the work at my shop is a considerable portion of my work.

Mr. Fryer concludes that only boys whose mental tests show a level within the range found in the occupation should select this occupation, a conclusion that at first sight seems logical. I am now employing a grade of boy considerably superior to that in the average shop, and yet none have sufficient intelligence of the right kind to make the most of their work. I am trying to secure boys of an intelligence quite superior to the ordinary, and so naturally disagree with the idea of taking the existing conditions as a standard.

In his chart we find mechanical engineer at the top, with public school teacher a little lower down, and some distance below this is draftsman. A little consideration will show

that there is another reason for this besides the mental ability required for the occupation. The public school teacher has a blind alley job. No matter how much intelligence the teacher possesses, there is very little chance for an opening into another field, except by making a radical change in the nature of the work. On the other hand, a skilled draftsman automatically becomes a mechanical engineer. At the same time a person who is unsuccessful as a mechanical engineer can easily fall back as a draftsman.

In this way the top of the range for the draftsman is automatically cut off. In general we may say, that the occupation that offers to a superior intelligence the best opportunities for advancement, will show an inferior grade of intelligence in those that remain. A bright boy looking for opportunities should select the occupation from which the greatest number of superior persons have advanced, rather than the one in which they have remained. The occupations with high intelligence scores in proportion to the skill required are the very ones that should be avoided.

In looking over the chart we find other striking fallacies. Consider the jobs of production lathe hand and general machinist. The chart represents the lathe hand as possessing more intelligence than the machinist, a statement so absurd that we must look for some cause. The definitions of these occupations are not given in the dictionaries, at least not in the four in which I looked, but prevailing practice, at least in New England, would define them somewhat as follows. A lathe hand is a person capable of operating a lathe after it has been set up, and the tools selected and sharpened for him. He is not expected to use drawings, but is supplied with gauges for each thing that he has to measure. He may possess more skill than this, but when he reaches the point where he can be considered an expert on the lathe, the term of specialist is applied.

The general machinist, on the other hand, is a skilled worker. He is expected to work from drawings, select the tools for the job, set up the lathe and a dozen other kinds of machines, and complete the job with the use of sensitive measuring instruments. It is generally considered that it takes about four years to become a machinist, while a girl can be taught what is required of a lathe hand in a week.

The intelligence tests show that the lathe hand has a higher degree of intelligence than the machinist. What can be the explanation? There are several possible. These figures were taken from draft statistics. During the war, the demand for machinists in the government plants was so great that none need be drafted. Many enlisted, but it might even be questioned whether any were drafted. In this case the figures for machinist would really be taken from some other occupation, perhaps from those who claimed to be machinists, but did not possess sufficient intelligence to really become such.

On the other hand, it was so easy to replace lathe hands with girls that a manager would hesitate to claim exemption for them, even if they possessed a considerable degree of intelligence.

Another possible explanation is that the army might have used the terms lathe hand and machinist to mean something other than the ordinary shop practice. The army often does have special meanings for its terms, and such would not be unlikely in this case. If they used the English meaning of the word machinist, it would have quite a disturbing effect, for the word machinist is applied to one occupation in England and to quite a different occupation in America.

The place of fisherman at the bottom of the list, with the most intelligent fisherman at about the same level as the least intelligent lathe hand, is almost enough in itself to throw out the tests as measures of intelligence. Anyone with shop experience knows that the lowest lathe hands are practically feebleminded, and to say that such a grade of intelligence could sail a small ship out of sight of land for days or weeks, and bring it back safely to port with a load of fish in all kinds of weather, is absurd on the face of it. But then the term fisherman may in this case be used to mean laborers hired by the real fishermen as helpers.

All of which goes to show that the table as given might be used to advantage by lexicographers in determining the usage of words,

but for selecting occupations it is more apt to mislead than to serve any useful purpose.

A. W. FORBES

WORCESTER, MASSACHUSETTS

EDUCATIONAL RESEARCH AND STATISTICS

UNDEVELOPED RESOURCES: SOME STUDIES IN GROUP INTELLIGENCE IN SIOUX CITY HIGH SCHOOL

STUDIES conducted in Sioux City during the winter of 1921-22 have pointed the way to the general conclusion that the army tests are quite accurate in showing group tendencies, but that they are not so accurate when used as a final analysis of the individual pupil.

It is with group tendencies and specific deductions concerning group movements that the results of several different studies are briefly presented here.

School equipment, school buildings, teachers' salaries, administration machinery are economical and valuable or wasteful and extravagant in the kind of return they make to the community in training pupils and developing their latent abilities of character and mentality. The greatest extravagance in which any school system can indulge is the failure to develop to a high degree, even if not to the limit of capacity, the most highly superior minds among its pupils. In this sense of mental capacity, men are not born equal. The greatest return to the city and the race has its possibilities in the development of the superior mentalities among the pupils in its schools. The immediate question is the location and analysis of these superior mentalities.

Any study then should follow the lines of an inquiry into the manner in which these mentalities act. The eleven studies noted here take up certain phases of intelligence in pursuit of this problem. Results of investigations are presented concerning superior ability and achievement, ability and year of elimination, number of dropped and graduated pupils, the time when pupils leave high school, mentality in relation to those dropped and those graduated, mentality in relation to achievement and failures, considered with subject groups, and finally a study of disorganization and mentality.

MEDIANS FOR HALF YEARS AND YEARS—GRADES 9 TO 12

	Jr.	Sr.	Combined
Ninth Grade			
Median Alpha	98—	106—	102
Median Mental Age	16.3—	16.7—	16.5
Tenth Grade			
Median Alpha	112—	115—	114
Median Mental Age	16.9—	17—	17
Eleventh Grade			
Median Alpha	119—	130—	124
Median Mental Age	17.2—	17.8—	17.4
Twelfth Grade			
Median Alpha	125—	132—	128
Median Mental Age	17.5—	17.8—	17.7

It will be noticed from the above summary of medians that there is a noticeable increase in class intelligence in each succeeding year.

The median gain of the eighth grade over the seventh amounts to 15 points on the army scale of 212 possible points, a relative gain of 22.4 per cent. The gain of the ninth grade over the eighth is 19.5 per cent.; that of the tenth over the ninth 16.3 per cent.; the eleventh over the tenth 8.8 per cent.; the twelfth over the eleventh 3.2 per cent. The number of cases are from 400 to 600 in each half year. Seventh and eighth grades are included only in this one paragraph.

Two factors are evidently at work in this increase. The first of these is increasing maturity through added years and the other is elimination of those of lesser mentality. The study of elimination shows that schools have automatically eliminated more inferior mentalities than superior ones.

COMPARISON OF SCORES—APRIL, 1919, AND DECEMBER, 1921

In December, 1921, there were remaining in the high school 165 pupils who had taken another form of the Army Alpha examination in April, 1919.

Number of pupils still remaining in school	165
Average points of deviation (increase)	6
Per cent. of deviation (increase)	2.8
Number showing marked advance over 1919 test	80
Number showing no marked deviation from 1919	57
1919 median of those who made less than before	125

1921 median of those who made less than before 107
(Probably no group reason for decrease.)
1919 median of those who made more than before 116
1921 median of those who made more than before 134
1919 median of those who showed no marked deviation..... 128
1921 median of those who showed no marked deviation..... 129

The above data shows conclusively that the army examinations are not absolutely accurate but that they are reasonably so. A variation of 2.8 per cent. in the median of 165 boys and girls with two and one half years time between two different examinations on two different forms is sufficiently accurate to show group tendencies. In addition it shows that the index of native mental capacity changes but little after the first year in high school.

HIGHLY SUPERIOR ABILITY AND ACHIEVEMENT

The upper 10 per cent. of mentality in the senior high school includes mental scores from 145 to 205 points inclusive. These would rate as "highly superior" mentalities under the army standard. It was found in listing the semester school grades of the first semester of 1921-1922 that this upper 10 per cent. had made 212 "A" school grades or 47½ per cent. of all the A school grades made in the school. In itself this would seem to be a rather commendable showing.

However, pupils with this mentality should have been able to achieve *all* A school grades. This is the point worth noting—*only 25 per cent. of the highly superior pupils are living up to their capacity. Seventy-five per cent., then, must be devoting their energies to something else than their school work.* Either they are deliberately doing less than they are capable of doing or the school and teachers are not presenting the subjects in the proper manner, or the subjects that are presented do not appeal to the intelligence of the pupil as being worth any real effort on his part. This is a problem that should challenge the interest of every thoughtful school administrator and teacher.

The bald statement of facts which follows should drive home the truth of the paragraphs preceding. The race can afford to waste almost anything except the undeveloped part of its brain.

Pupils making Army A in mental test..... 301
Pupils making Army B in mental test..... 535

Pupils of *Superior Intelligence* in high school 836
Pupils making all A school grades..... 21
Pupils making all A and B school grades..... 81
Pupils making all B school grades..... 10

Pupils having school grades better than average 112
Mental median for pupils with all A school grades 150
Mental median for pupils with all A and B school grades..... 131
Mental median for pupils with all B school grades 113
Mental median for all pupils with better school grades..... 140

MENTALITY AND YEAR OF ELIMINATION

In the spring of 1919 another form of the Alpha examination was given in the senior high school. A special study of 227 out of the total of 440 pupils who had been dropped between April, 1919, and January, 1922, revealed that 31.5 per cent. of these pupils dropped out of school in the ninth grades, 54.5 per cent. in the tenth, 12.8 per cent. in the eleventh, 1.2 per cent. in the twelfth. Of the 25 pupils who made a score of 75 (mental age, 14.9) not one of them had graduated or remained in school for two and one half years. Most of those pupils who had 135 or more (minimum A in the Army table) could be accounted for by their entrance into other schools.

The median of those dropped is 95 (mental age, 16.1). The median of those pupils who remained in school until graduation was 132 points (mental age, 17.8) and of those who are still in school is 127 (mental age, 17.6). On the 212 point scale 17.4 per cent. and 15 per cent. represent the absolute amounts of the superiority of the graduates and those still in school, over those who have dropped out. However, if one uses the mental median of those who dropped as 100 per cent. then the median of those who graduated would be 139 per cent. and the median of those still in the school would be 133½ per cent.

TABLE NO. 1

NUMBER DROPPED AND GRADUATED, 1919-1921

	Jr. 9		Sr. 9		Jr. 10		Sr. 10		Jr. 11	
	B	G	B	G	B	G	B	G	B	G
No. enrolled	119	107	101	114	81	91	82	148	48	90
No. in school to-day	60	37	30	52	6	6	1	0	0	0
No. graduated	1	2	20	10	34	42	52	90	31	68
No. dropped	58	68	51	52	41	43	30	58	17	22
	h-173	*h*-182	*h*-174	*h*-144	*h*-171					
1919 median still in school	126	120	127	123	131					
	l-76	*l*-86	*l*-79	*l*-102	*l*-89					
	h-174	*h*-166	*h*-185	*h*-161						
1921 median still in school	132	126	136	127						
	l-90	*l*-79	*l*-85	*l*-101						
	h-161	*h*-164	*h*-168	*h*-182	*h*-155	*h*-141	*h*-144	*h*-169	*h*-144	*h*-147
1919 median dropped	90	91	126	116	99	97	102	100	85	104
	l-62	*l*-61	*l*-84	*l*-84	*l*-71	*l*-57	*l*-67	*l*-63	*l*-61	*l*-68
			h-171	*h*-183						
1921 median still in school			131	121						
			l-84	*l*-80						
			h-132	*h*-132						
1919 median dropped			97	96						
			l-64	*l*-62						
					....	*h*-158	*h*-174	*h*-176	*h*-166	*h*-188
1919 median those graduated					137	130	134	133	131	132
					....	*l*-89	*l*-85	*l*-95	*l*-87	*l*-85
1921 median those graduated						131				

B = boys. G = girls. *h* = high. *l* = low.

It seems plain that *it requires a real superiority in mentality for a high school beginner to complete his high school course.* Unquestionably there are other things than mentality which enter into the matter of completing a high school course but the evidence of these figures would tend to show that it *is probably the most decisive factor in determining the success of the high school pupil.* The graduates scored only three points under the minimum for the army classification A, rated as "highly superior ability."

NUMBER DROPPED AND GRADUATED

The particularly important things in the above table are that more were dropped than graduated in two years and one half and that the median of those graduating and remaining in school is from 30 to 40 per cent. greater than those that drop.

WHEN THEY LEAVE HIGH SCHOOL

The condition would not quite approximate other high schools in the matter of first year pupils because of the fact that two thirds of the ninth grade of the city are not in the

WHEN THEY LEAVE HIGH SCHOOL

TABLE NO. 2

MENTALITY AND TIME OF ELIMINATION

(227 Cases out of 440 from April, 1919, to January, 1922)

Class	Jr. 9		Sr. 9		Jr. 10		Sr. 10		Jr. 11		Sr. 11		Jr. 12		No. pupils
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
C..... 55-64	1	2	....	2	....	1	....	1	....	....	....	....	....	....	7
C..... 65-74	5	1	3	2	1	2	1	2	....	1	....	....	....	....	18
C+..... 75-84	2	3	2	3	3	6	4	4	1	2	1	1	....	....	32
C+..... 85-94	8	3	5	4	8	1	6	4	....	5	1	2	1	....	48
C+..... 95-104	4	1	1	2	9	8	7	11	1	5	2	....	1	1	53
B..... 105-114	1	5	2	....	2	4	6	5	1	2	1	1	....	....	30
B..... 115-124	....	....	3	....	5	1	2	2	2	....	....	....	....	....	17
B..... 125-134	2	3	....	....	....	....	6	2	....	....	....	....	....	....	13
A..... 135-144	....	....	1	1	....	....	....	....	....	....	....	....	....	....	3
A..... 145-154	....	1	....	....	....	....	....	1	....	1	....	....	....	1	4
A..... 155-164	....	....	....	....	....	....	....	2	....	....	....	....	....	....	2
A..... 165-174	....	....	....	....	....	....	....	1	....	....	....	....	....	1	2
A..... 175-184	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1
Totals	23	19	18	14	28	23	32	35	5	16	5	4	2	3	227

B—Boys. G—Girls.

senior high school building. It should be noted that this tenth year is the first year in the senior high school for two thirds of the pupils entering the high school. *However, the most outstanding point in the matter of dropped pupils is that 84½ per cent. of them left in one of these two years.*

This brings us to the consideration of mentality and elimination. In 1919 there were only 25 pupils who made a score of less than 75 points. The most significant fact in the entire consideration of elimination is that *the median of all the pupils who dropped out for any reason whatsoever, was only 95 points,* while the *median for all of the graduates during this same period was 132 points.*

It has actually required one third greater mentality to finish the high school course than it has to begin it. Perhaps *the greatest factor in high school success is that of general intelligence* even though the tests we now have do not measure such other mental qualities as pride of workmanship, persistence, vitality, endurance and capacity for making the most of one's native ability. The points which the Alpha examination does measure in mental characteristics are evidently vital points in the successful carrying on of school work.

MENTALITY AND ACHIEVEMENT

The median mentality on the Alpha scale of those making "A" school grades in the following subject groups was:

English	135
Business English	105
Mathematics	135
History	144
Science	140
Latin	150
French	144
Spanish	150
Public Speaking	140
Shorthand	140
Typewriting	120
Bookkeeping	135
Industrial Training	130
Home Economics	120

It should be pointed out that Latin and Spanish top this list with 45 points more than Business English. The lowest mentality that made a school grade "A" in Latin or Spanish was 120 (mental age, 17.3), which corresponds to a "B" on the Army Scale. In distinction from this an "A" was made in Home Economics with a mental rating of 60 points (mental age, 13.8). "A's" were made in English, Mathematics, History, Public Speaking and Typewriting by pupils with mental scores below 100 points. There is seemingly a higher grade of mentality needed in order to carry Latin successfully than for almost any other high school subject.

MENTALITY AND FAILURES

It would be approximately correct to say that *the chances are against any one with less than "B" (Army rating superior) to finish a four year high school course.* In this connection it should be recalled that the mental median of all the high school graduates from 1919 to 1921 was 132, 27 points, or 12.7 per cent., above the minimum Army "B," 105 points.

MENTALITY AND SUBJECTS

Closely related to the foregoing analysis was the endeavor to determine if certain subjects required a higher degree of mentality for successful completion than others. First, it is well to note that 7 per cent. of all the school grades made last semester were "A's." Three hundred pupils (23½ per cent.) of the number examined fell within the Army rating of A. The median intelligence for those making "A" school grades last semester was 135 points. That is, as many made A school grades with less than A mentality as those who possessed A mentality. Only a scattering A school grade was achieved below a mentality rating of 95 points. Shorthand, Bookkeeping, Latin and Spanish seemed to require a distinctly higher level (from 20 to 30 points more) of intelligence to achieve A school grades than other subject groups. The number of cases run from 163 in Shorthand to 447 in Latin.

SUBJECTS—ACHIEVEMENT—FAILURES

The following tabulation points out the relative number of failures in subject groups as well as the number of A school grades. Only those subject groups were taken in which there were at least a hundred cases. One will note that the number of cases in these groups ran from 129 to 993.

Subject Groups	Cases	F's	% F's	A's	% A's
English	993	97	9.7	80	8
Bus. English	303	9	2.9	22	7.2
History	754	82	10.8	39	5.1
Mathematics	941	122	12.8	59	6.2
Science	726	56	7.7	41	5.6
Latin	447	90	20.1	17	3.8
French	272	28	10.3	36	13.2
Spanish	129	22	17.6	10	7.7
Public Speaking	147	21	13.6	21	13.6
Bookkeeping	171	11	6.4	4	2.3
Shorthand	163	45	27.6	1	.6
Typewriting	218	25	11.4	5	2.2
Home Economics	614	10	1.6	55	8.9
Manual Training	493	6	1.2	19	3.8

The failures for the entire high school the first semester of 1921-1922 were 10.08 per cent. This does not, of course, include pupils who have been dropped during the year.

The great groups of subjects in point of number of pupils are English, Mathematics, History and Science. History is almost on the median while the Mathematics failures run one fifth as many again. The A's do not run as high as the failures. Pupils are falling by the wayside much faster than they are making superior ratings.

The failures for Latin, 20.1 per cent., and failures for Shorthand, 20.6 per cent., were so high that a special investigation was made of each of them. The two great manual groups, Home Economics and Manual Training, are remarkable for the small per cent. of failures in 1,107 cases.

DISORGANIZATION AND MENTALITY

Does mentality have anything to do with disorganization?

In trying to answer this question we asked every teacher in the high school to make a list of the boys and girls whom they believed were an element of disorder in school life or who had been so within the last two years. These 69 boys and 10 girls had an intelligence median of 126 points, 7 points, only 3½ per cent., from the median for the school. We found disorganizers in every level of intelligence from the very highest to the very lowest. *There is not necessarily any direct connection between mentality and disorganization* among high school pupils considered as a group.

SUMMARY OF DEDUCTIONS

I believe that the foregoing studies support the statements which follow:

1. Each succeeding school grade shows an increasing mentality median due to

a. Gradual elimination of inferior mentalities.

b. Increasing judgment and maturity, which tend to become negligible shortly after the high school is reached.

2. The Army Alpha group examination is reliable for testing of groups and measuring of group ability. It has a less degree of accuracy for individuals.

3. Seventy-five per cent. of highly superior pupils are failing to live up to their capacity achievement. This is the most promising place for educational salvage.

4. Eighty-four and one half per cent. of pupils dropping from the senior high school in Sioux City leave during the first two years.

5. One third more mentality is needed to graduate than to begin high school.

6. Mentality is probably the most decisive factor in determining graduation.

7. More pupils drop high school than graduate. Mentality is a leading factor in this situation.

8. Certain subject groups require distinctly higher mentalities to achieve success than do others.

9. The chances are against the graduation of any pupil with less than B (army rating, "superior").

10. Success and failure vary with subject group.

11. Failures for the school run 10 per cent.

12. There is no direct connection between mentality and disorganization or indiscipline.

Educational systems must take into further consideration varying degrees of mentality or levels of intelligence. They must constantly strive for courses of study and methods that will develop the latent powers of each individual and make him repay to society a profit on the investment, which society has intrusted to him.

ROBIN LYNN HAMILTON
SIOUX CITY, IOWA